

Claims

1. Method for providing network elements in a communication system, wherein
 - 5 - at least partially loaded network elements are determined by means of providing a service,
 - load thresholds are stipulated for network elements
 - on a service provision request, an exceeding of the stipulated threshold values connected with a provision of the requested
 - 10 service is checked,
 - on exceeding of the threshold values, a provision of required network elements is initiated.
2. Method according to Claim 1,
15 wherein information describing the functional properties and topological arrangement of network elements relevant to a provision of a service is stored in a network element database and assigned to the service.
- 20 3. Method according to Claim 2, wherein load values of network elements, said load values being connected with a provision of a service, are stored in the network element database and the network elements loaded by a provision of a service are determined by means of these load values.
- 25 4. Method according to any one of Claims 2 or 3, wherein the load threshold are stored in the network element database.
- 30 5. Method according to any one of Claims 2 to 4, wherein information relating to network elements specified by a service level agreement as relevant to the provision of a service is stored in the network element database.
- 35 6. Method according to any one of Claims 1 to 5,

wherein loadings of network elements are determined by performance measurements in order to check an exceeding of the stipulated load threshold values.

5 7. Method according to any one of Claims 1 to 6,
wherein a provision of required network elements is initiated by a
work instruction to a network planning and/or network operating
system.

10 8. Method according to any one of Claims 1 to 6,
wherein a provision of required network elements is initiated by an
automatic installation of the respective network elements.

9. Communication network control and monitoring system having
15 - a communication connection management device which is fashioned
such that

- at least partially loaded network elements are determined by
means of a provision of a service,
- load thresholds are stipulated for network elements,
- 20 - on a service provision request, an exceeding of the
stipulated load threshold values connected with a provision of
the requested service is checked,
- on an exceeding of the threshold values, a provision of
required network elements is initiated,
- 25 - a network element database for storing information describing the
functional properties and topological arrangement of network
elements relevant to a provision of a service and for assigning this
information to the respective service,
- a service quality monitoring device and/or an error monitoring
30 device for comparing recorded measured values with information
stored in the network element database for inadmissible deviations
and for generating a message about a service capacity reduction,
giving details of the service concerned in the case of an
inadmissible deviation.

10. Control program for a communication connection management device of a communication network control and monitoring system according to Claim 9, said control program being loadable into a working memory of a data processing system assigned to the
- 5 communication connection management device and having at least one code section, on execution of which
- at least partially loaded network elements are determined by means of a provision of a service,
 - load thresholds are stipulated for network elements,

10 - on a service provision request, an exceeding of the stipulated load threshold values connected with a provision of the requested service is checked,

 - on an exceeding of the threshold values, a provision of required network elements is initiated,

15 if the computer program is running in the data processing system.